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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,046	07/31/2001	Dennis Bijwaard	1-1	4257

7590 09/20/2006

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

57

Office Action Summary	Application No. 09/919,046	Applicant(s) BIJWAARD ET AL.	
	Examiner Bob A. Phunkulh	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to applicant's 07/06/2006 amendment(s)/response(s) in the application of **BIJWAARD et al.** for "**CONTROLLING LEVELS OF TRAFFIC IN A TELECOMMUNICATIONS NETWORK WITH A RELAY NODE AND A NETWORK NODE THEREFOR**" filed 07/31/2001. The amendments/response to the claims have been entered. Claim 6 has been canceled. No claims have been added. Claims 1-5, 7-11 are now pending.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: admission control server 12 is not shown in figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5, 7-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is well known in the art that standard 802.11 have a maximum data rate of 54 Mbps using OFDM scheme and 2Mbps or 1Mbps for using CSMA/CA scheme; and the access node or point (relay node) is further connected to a network (Internet) via 10-Base-T or 100-Base-T Ethernet link (10Base-T have up to 10Mbps capacity, and 100Base-T have 100Mbps capacity). Therefore, the medium from the relay node to the network will always have more capacity i.e. bandwidth than the wireless medium from the relay node to user node. In the specification, the applicant indicated that the shared medium can be CSMA/CA network (see page 3 line 9), where the standard IEEE 802.11 using CSMA/CA scheme have a data rate of 2 Mbps. Therefore, the applicant fails to described the claimed subject matter especially how allocating "a data transmission rate for traffic from user nodes via the relay node to user nodes which is twice that for traffic via the relay node into or out of the network" can be achieved in the original specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ayyagari et al.* (US 2001/0024434), hereinafter *Ayyagari*.

Regarding claims 1 and 7, *Ayyagari* discloses a telecommunications network comprising a plurality of user nodes (web enabled cellular phone 210, laptop computer 215, digitizing pad 220, see figure 2), a relay node (access point 200), and controller means (subnet bandwidth manager "SBM" 205, see figure 2) operative to allocate resources so as to control levels of traffic transmitted from/to the user nodes via the relay node, the controller means being operative to allocate a data transmission rate for traffic from user nodes via the relay node to user nodes via the relay node in from or out of the network (the SBM allocate bandwidth for the requesting user nodes via the relay node, see abstract; and steps 500, 505, see figure 5).

Ayyagari fails to explicitly disclose that the controller means being operative to allocate a data transmission rate for traffic from user nodes via the relay node to user nodes which is up to twice that for traffic via the relay node in from or out of the network.

Ayyagari, however, discloses the access point or a base station hosts a subnet bandwidth manger (SBM) functionality for managing resources across shared wireless media (see paragraph 0057).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to allocate the wireless link between the access point 200 and user node i.e. 210, 215, 220, twice or more bandwidth rates than the "wired link" between the access point 200 and the receiving node 230, in order to maximize the link throughput of the wireless link between trusted wireless users i.e. 210 and 220 within a small network, and regulating the network resources into and out of the network at the relay node.

Regarding claim 2, *Ayyagari* discloses at least some user nodes include a respective regulator of best effort traffic, the regulators being controlled by traffic level control signals sent by the controller (the starting node hosts QOS handling mechanisms such as RSVP and Packet Scheduler, see paragraph 0057).

Regarding claims 3 and 8, *Ayyagari* discloses the regulators are controlled by the control signals so as to set the maximum level of traffic sent per unit time by their respective nodes (the authorization is communicated to the task by returning an acknowledgment message to the starting node. The QoS handling mechanism at the starting node assigns the priority level tag, or alternatively in the case of an embodiment of the invention where the starting node is also the access point for a wireless link into a network, the SBM approves a requested tag value, see paragraph 0057).

Regarding claim 4, *Ayyagari* discloses the traffic comprises best-effort traffic (see paragraph 0055).

Regarding claim 5, *Ayyagari* discloses the traffic comprises traffic having a predetermined associated Quality of Service (QoS) (see paragraph 0055-0056).

Regarding claim 6, *Ayyagari* discloses the telecommunications network is a wireless local area network (see figure 2 and paragraph 0002).

Regarding claim 9, *Ayyagari* discloses a network node for a telecommunications network, the node comprising

a regulator (SBM, see figure 2) operative under the control of received control signals (request signals from wireless devices, see paragraph 0048) to limit the levels of traffic sent on by the node per unit time dependent on desired data transmission rate (QOS), the desired data transmission rate for traffic from user nodes via the relay node to user nodes being set at up to twice that for traffic via the relay node in from or out of the network (the access point 200 includes subnet bandwidth manger "SBM" to control access to the network, see paragraphs 0017 and 0047).

Ayyagari fails to explicitly disclose that the controller means being operative to allocate a data transmission rate for traffic from user nodes via the relay node to user nodes which is up to twice that for traffic via the relay node in from or out of the network.

Ayyagari, however, discloses the access point or a base station hosts a subnet

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bandwidth manger (SBM) functionality for managing resources across shared wireless media (see paragraph 0057).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made to allocate the wireless link between the access point 200 and user node i.e. 210, 215, 220, twice or more bandwidth rates than the “wired link” between the access point 200 and the receiving node 230, in order to maximize the link throughput of the wireless link between trusted wireless users i.e. 210 and 220 within a small network, and regulating the network resources into and out of the network at the relay node.

Regarding claim 10, *Ayyagari* discloses the node being a relay node (Access Point 200 is relay node, see figure 2).

Regarding claim 11, *Ayyagari* the node being a user node (the starting node, see paragraphs 0057 and 0060).

Response to Arguments

Applicant's arguments with respect to claims 1-5, 7-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

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or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

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220 20th Street South
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Wellington Chin**, can be reach on **(571) 272-3134**. The fax phone number for this group is **(571) 273-8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bob A. Phunkulh
Primary Examiner
TC 2600
Technology Division 2616
September 18, 2006